

RD
RK
ork
ES
ion
ER
jan
ES
ien
tor
ITZ

ENCYCLOPEDIA OF POLYMER SCIENCE AND ENGINEERING

VOLUME 16

Styrene Polymers
to
Toys

A WILEY-INTERSCIENCE PUBLICATION

John Wiley & Sons

NEW YORK • CHICHESTER • BRISBANE • TORONTO • SINGAPORE

C

STY
SUI
SUI
SUI
SUS
SUT
TEC
TEL
TEL
TEM
TES
TET

Copyright © 1989 by John Wiley & Sons, Inc.

All rights reserved. Published simultaneously in Canada.

Reproduction or translation of any part of this work beyond that permitted by Section 107 or 108 of the 1976 United States Copyright Act without the permission of the copyright owner is unlawful. Requests for permission or further information should be addressed to the Permissions Department, John Wiley & Sons, Inc.

Library of Congress Cataloging in Publication Data:
Main entry under title:

Encyclopedia of polymer science and engineering.

Rev. ed. of: Encyclopedia of polymer science and technology. 1964—

"A Wiley-Interscience publication."

Includes bibliographies.

1. Polymers and polymerization—Dictionaries.

I. Mark, H. F. (Herman Francis), 1895—

II. Kroschwitz, Jacqueline I. III. Encyclopedia of polymer science and technology.

TP1087.E46 1985 668.9 84-19713
ISBN 0-471-81182-3 (v. 16)

Printed in the United States of America

10 9 8 7 6 5 4 3 2

**THERMOPLASTIC
POLYMER**

A thermoplastic polymer is one that is capable of being repeatedly softened by heating and hardened by cooling through a characteristic temperature range, and that in the softened state can be shaped by flow into articles by molding or extrusion. Thermoplastic applies to those materials whose change upon heating is substantially physical (1) (See also THERMOSETTING POLYMER).

BIBLIOGRAPHY

1. *ASTM D 883-86b, Standard Definitions of Terms Relating to Plastics*, American Society for Testing and Materials, Philadelphia, Pa., 1986.

THERMOGRAVIMETRIC ANALYSIS. See DEGRADATION; THERMAL ANALYSIS in the Supplement.

THERMOMECHANICAL PROPERTIES. See MECHANICAL PROPERTIES.

**THERMOSETTING
POLYMER**

A thermosetting polymer is one that is capable of being changed into a substantially infusible or insoluble product when cured by heat or other means (1). The cured polymer may be termed thermoset (see also CURING; THERMOPLASTIC POLYMER).

BIBLIOGRAPHY

1. *ASTM D 883-86b, Standard Definitions of Terms Relating to Plastics*, American Society for Testing and Materials, Philadelphia, Pa., 1986.

THETA PARAMETER. See SOLUTION PROPERTIES.

THIAZOLE POLYMERS. See POLYBITHIAZOLES; POLYBENZOTHAZOLES AND POLYBENZOXIAZOLES.

THIN-LAYER CHROMATOGRAPHY. See CHROMATOGRAPHY.